

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

2. Claim **1**, is objected to because of the following informalities: line 5 recites "the method being characterized in that it comprises". Examiner would like to suggest the phrase "the method comprises". Appropriate correction is required.
3. Claim **5**, is objected to because of the following informalities: line 25 the term "(14)" needs to be deleted. Appropriate correction is required.
- 4.
5. Claim **7**, is objected to because of the following informalities: line 5 recites 'and it is verified". Examiner would like to suggest the phrase "and verified that". Appropriate correction is required.
6. Claim **8**, is objected to because of the following informalities: line 4 the term "(18)" needs to be deleted. Appropriate correction is required.
7. Claim **11**, is objected to because of the following informalities: line 3 and line 4, the absorption coefficient constant is not printed properly. Appropriate correction is required.
8. Claim **13**, is objected to because of the following informalities: line 12, 14, 15, 17, and 19- 23, the absorption coefficient constant is not printed properly. Appropriate correction is required.

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9. Claim **14**, is objected to because of the following informalities: lines 2-5, the absorption coefficient constant is not printed properly. Appropriate correction is required.

10. Claim **17** is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim Claim 16 is a multiple dependent claim, and its not clear if Claim 17 is in independent form or an improper multiple dependent claim. See MPEP § 608.01(n). Appropriate correction is required.

11. Claim **27**, is objected to because of the following informalities: lines 4 and 5, the absorption coefficient constant is not printed properly. Appropriate correction is required.

12. Claim **29**, is objected to because of the following informalities: line 14-16, 17, and 19-23, the absorption coefficient constant is not printed properly. Appropriate correction is required.

13. Claim **30**, is objected to because of the following informalities: line 3, 4, 6, and 7, the absorption coefficient constant is not printed properly. Appropriate correction is required.

Claim Rejections - 35 USC § 112

14. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15. Claims **1-32** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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16. Regarding claim **1**, the preamble recites predetermining a target sound wave field, where as the body of the claims teach determining positions of the ultrasonic transducer array. As such either the preamble needs to be changed to be consistent with the scope of the body of the claims, or the body of the claims need to be amended to recite a step of determining the target sound wave field.

As in it's current form the scope of the claims are not clearly understood.

17. Claim **1** line 7 reads "image of bone barrier **at least in part by using X-ray**" it's not clearly understood what the scope of the claims are. As the imaging is either done using X-rays or without X-rays appropriate correction is required. Examiner suggests changing the language to "image of bone barrier" using X-rays".

18. Claim **5** line 8 reads "image of bone barrier **at least in part by using X-ray**" it's not clearly understood what the scope of the claims are. As the imaging is either done using X-rays or without X-rays appropriate correction is required. Examiner suggests changing the language to "image of bone barrier" using X-rays".

19. Regarding **Claim 17**, the scope of the position refiner means is not understood, as the "refiner means refers back to the specific position (which is calculated position using the simulation) instead it should be referring back to the position from the "locator means". Appropriate correction is required to clarify the language of the "position refiner means" to clearly recite how the positions are refined using the "locator means".

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20. Regarding claims **2-4, 6-16, and 18-32** these claims are dependent on independent claims 1, 5, and 17 as such they are also rejected under 35 USC 112.

Allowable Subject Matter

21. Claims **2-4, 6-16, and 18-32** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

22. Claims **1, 5, and 17** would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANJAY CATTUNGAL whose telephone number is (571)272-1306. The examiner can normally be reached on Monday-Friday 9-5.

24. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571) 272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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25. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SANJAY CATTUNGAL/
Examiner, Art Unit 3768